

Listing of the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

1. (Cancelled).
2. (Currently Amended) A method for producing a modified oilseed material comprising:
extracting oilseed material with an aqueous solution to form a suspension of particulate matter in an oilseed extract; and
passing the extract through a filtration system including a microporous membrane to produce a permeate and a protein-enriched retentate, wherein the microporous membrane has a filtering surface with a contact angle of no more than 30 degrees ~~to form the modified oilseed material.~~
3. (Cancelled).
4. (New) The method of claim 2 wherein the aqueous solution has a pH of about 7.0 to 9.5.
5. (New) The method of claim 2 wherein the microporous membrane has an MWCO of about 25,000 to 500,000.
6. (New) The method of claim 2 wherein the passing step comprises passing the extract through the filtration system under a transmembrane pressure of no more than about 50 psig.
7. (New) The method of claim 2 wherein the passing step comprises passing the extract through the filtration system at about 55°C to 60°C.
8. (New) The method of claim 2 wherein the protein-enriched retentate includes at least about 90 wt % (dsb) protein.

9. (New) A method for producing a modified oilseed material comprising:
extracting oilseed material with an aqueous solution to form a mixture of particulate matter in an extract solution;
removing at least a portion of the particulate matter from the mixture to form a clarified extract; and
passing the clarified extract through a filtration system including a microporous membrane to produce a permeate and a protein-enriched retentate, wherein the microporous membrane has a filtering surface with a contact angle of no more than about 30 degrees.
10. (New) The method of claim 9 wherein passing the clarified extract through the filtration system comprises first passing an original volume of the extract through the filtration system while adding water to the extract in a feed tank so as to substantially maintain the original volume; and subsequently passing the extract through the filtration system while allowing the retentate to be concentrated by a factor of at least 2.5 relative to the original volume.
11. (New) The method of claim 9 wherein the aqueous solution has a pH of about 7.0 to 9.5.
12. (New) The method of claim 9 wherein the passing step comprises passing the clarified extract through the filtration system at about 55°C to 60°C.
13. (New) The method of claim 9 wherein the passing step comprises diafiltering the protein-enriched retentate through the filtration system to produce a diafiltration retentate and a diafiltration permeate, and the diafiltration retentate includes protein-enriched dissolved solids.
14. (New) The method of claim 9 wherein the protein-enriched retentate has no more than about 7000 mg/kg (dsb) sodium ions.
15. (New) The method of claim 9 wherein the oilseed material comprises soybean material.

16. (New) The method of claim 9 wherein the passing step comprises passing the extract through the filtration system under a transmembrane pressure of no more than about 50 psig.

17. (New) The method of claim 9 wherein the passing step comprises first passing the extract through the filtration system to form a concentrated retentate; and subsequently passing the concentrated retentate through the filtration system while adding water to the concentrated retentate so as to substantially maintain the volume of the retentate.

18. (New) The method of claim 17 wherein the concentrated retentate includes at least about 90 wt % (dsb) protein.

19. (New) The method of claim 9 wherein the microporous membrane has an MWCO of at least 25,000.

20. (New) The method of claim 9 wherein the microporous membrane has an MWCO of no more than about 500,000.

21. (New) The method of claim 9 wherein the extracting step is a continuous, multistage extraction operation.

22. (New) The method of claim 9 wherein the clarified extract has a dissolved solids content of at least 5 wt. %.

23. (New) The method of claim 9 wherein the aqueous solution is an aqueous alkaline solution having a pH of about 6.5 to 10.0.

24. (New) The method of claim 9 further comprising heating the retentate to at least 75°C for a sufficient time to form a pasteurized retentate.

25. (New) The method of claim 9 wherein the microporous membrane is a modified polyacrylonitrile membrane.

26. (New) A method for producing a modified oilseed material comprising:
extracting oilseed material with an aqueous solution having a pH of 6.5 to 10
at about 20°C to 60°C to form a mixture of particulate matter in an extract solution;
removing at least a portion of the particulate matter from the mixture to form a
clarified extract; and
passing the clarified extract at 55 to 65°C through a filtration system under a
transmembrane pressure of no more than about 50 psig to produce a permeate and a protein-
enriched retentate;
wherein the filtration system includes a microporous membrane having an
MWCO of 25,000 to 500,000 and a filtering surface with a contact angle of no more than
about 40 degrees.
27. (New) The method of claim 26 further comprising heating the protein-
enriched retentate to at least 75°C for sufficient time to form a pasteurized retentate.
28. (New) The method of claim 26 wherein the extracting step comprises
extracting the oilseed material with the aqueous solution for no more than about 30 minutes.
29. (New) The method of claim 26 wherein the extracting step comprises
extracting the oilseed material in a multistage operation which includes extracting the oilseed
material in an initial extraction stage with a protein-rich liquor stream from a subsequent
extraction stage having a pH of about 6.5 to 7.5; and extracting the oilseed material in a final
extraction stage with an aqueous solution having a pH of about 8.0 to 9.0.
30. (New) The method of claim 26 wherein the extracting step is a continuous,
multistage process with an apparent contact time of no more than 20 minutes.
31. (New) The method of claim 26 wherein the extracting step comprises
extracting the oilseed material in a multistage countercurrent operation which includes
heating a protein-rich extract from a selected stage to at least about 75°C to form a heat-
treated extract; and extracting oilseed material with the heat-treated extract in a different
extraction stage.

32. (New) The method of claim 26 wherein passing the clarified extract through the filtration system comprises first passing an original volume of the extract through the filtration system while adding water to the extract in a feed tank so as to substantially maintain the original volume, and subsequently passing the extract through the filtration system while allowing the retentate to be concentrated by a factor of at least 2.5 relative to the original volume.